The Lepidopterological Society of Japan

蝶と蛾 *Tyô to Ga*, **36** (4) : 167-176, 1986

One New Genus, Three New Species and Two Unrecorded Species of the Phycitinae from Japan (Lepidoptera, Pyralidae)

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One new genus will be established based on a new species, and two new species of the genera *Nephopterix* and *Eucampyla* will be described. Furthermore, two unrecorded species of the genera *Glyptoteles* and *Phycitodes* will be recorded with data of Japanese specimens and illustration of wings and genitalia.

I wish to express my obligation to Mr. M. SHAFFER, British Museum (Natural History), for his comfirmation to the identification of *Glyptoteles leucacrinella* ZELLER. My appreciation is also due to Dr. H. INOUE, Otsuma Women's University, for his valuable guidance. My hearty thanks are also due to Messrs. A. TOMISAWA, T. MAENAMI, N. HIRANO, N. MORI and Dr. R. SATO for the gift of valuable specimens.

Neorufalda n. gen.

Type species : *Neorufalda pullella* n. gen. *et* n. sp.

Labial palpus upturned, rather slender in both sexes ; the 3rd segment somewhat acuminated, and more or less shorter than 2nd. Maxillary palpus short, simple. Antenna minutely ciliated in male, filiform, slender in female, basal segment simple, cylindrical in both sexes. Fore wing with vein Cu_2 from well before lower angle of cell, and Cu_1 also from before the angle, M_2 and M_3 from lower angle of cell, and almost fused for a short distance from the angle, R_3 and R_4 somewhat long stalked, R_1 and R_2 well separated. Hind wing with vein Cu_1 from before lower angle of cell, M_2 and M_3 stalked for about one-third of their length, cell about a half length of the wing.

Male genitalia : Uncus triangulate with weak setae dorsally, and apical portion of dorsal surface ornamented with several short spines. Gnathos with a central process rather long, tapered, slightly hooked. Valva wide toward apex, and costa with a prominent triangular process near the end. Harpe simple, small, lobed. Sacculus rather narrow, simple. Vinculum short, broad. Anellus with conspicuous lateral short arms. Aedeagus short, broad, and with a long, thorn-like cornutus. Structure of eighth abdominal sternite shown in Fig. 20.

Female genitalia : Ovipositor with vesture of short setae. Apophyses anteriores very slender, almost straight, apophyses posteriores also slender, and nearly equal in length of apophyses anteriores. Eighth abdominal segment short. Ostium somewhat cup-shaped, weakly sclerotized. Ductus bursae narrow, rather long. Corpus bursae large, oblong, with two signa consisting of concentrated scobination, one is placed widely near junction of ductus bursae, and the other is placed narrowly at middle of corpus bursae.

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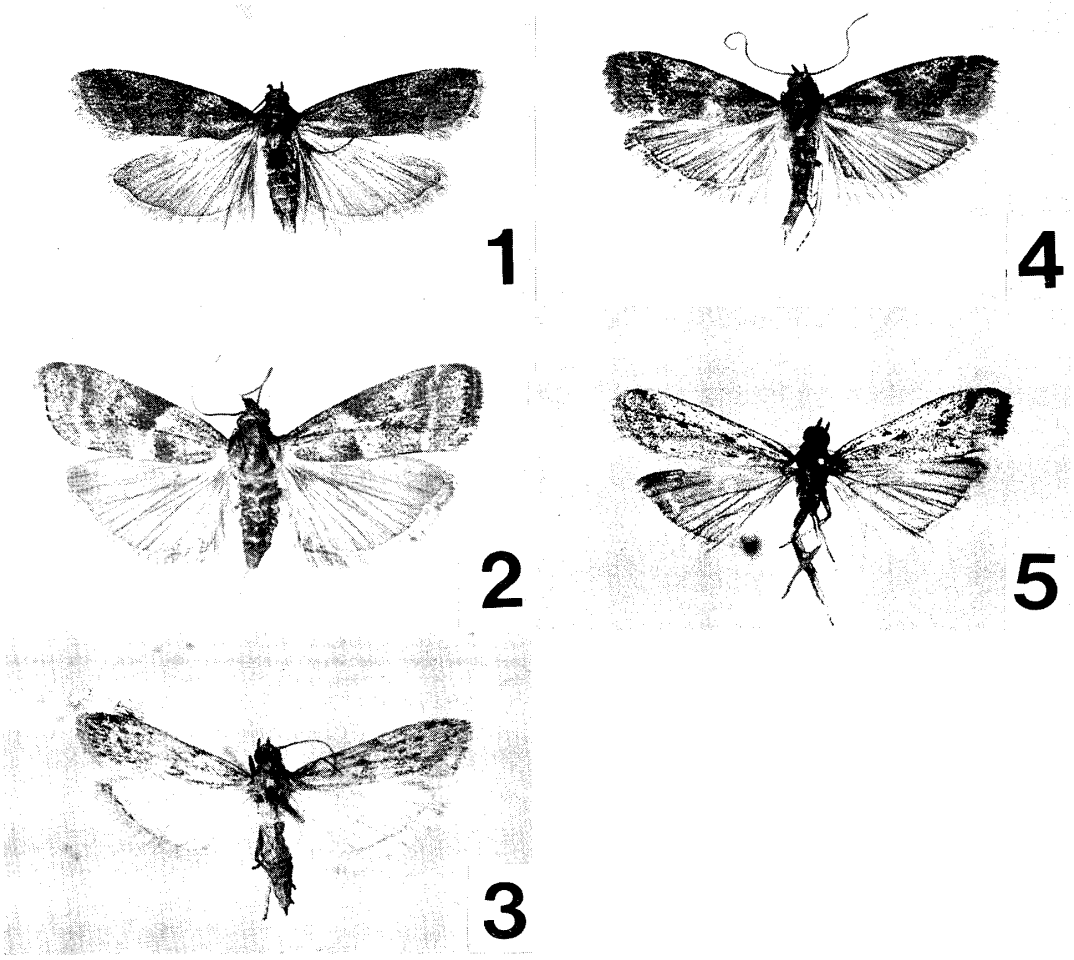

Figs. 1–5. Phycitinae. 1. *Neorufalda pullella* n. gen. *et* n. sp., (Holotype, ♀); 2. *Nephopterix tomisawai* n. sp., (Holotype, ♀); 3. *Eucampyla estriatella* n. sp., (Holotype, ♀); 4. *Glyptoteles leucacrinella* ZELLER, ♂; 5. *Phycitodes albatellus* (RAGONOT), ♀.

Remarks. This new genus is very close to the genus *Rufalda* ROESLER, 1972 (Ent. Z. Frankf. a. M. **82**: 263), agreeing with it in the genital characters, but conspicuously different in the following combinated external characters: fore wing with veins M_2 and M_3 almost fused for a short distance from lower angle of cell; hind wing of male with no fringe of scales on costal margin.

Neorufalda pullella n. sp.
(Figs. 1, 6, 7, 12, 13, 17, 20, 24)

External characters: Frons pale fuscous, smoothly scaled. Vertex fuscous, roughly scaled. Labial palpus fuscous except for white inner surface. Maxillary palpus small, pale fuscous, minutely scaled. Abdomen fuscous dorsally, and posterior edge of each segment ringed with pale yellow band, pale fuscous ventrally. Legs pale fuscous mixed with whitish scales in their outer surface, inner surface paler in color, each tarsomere with pale yellowish fine fringe posteriorly. Fore wing with ground

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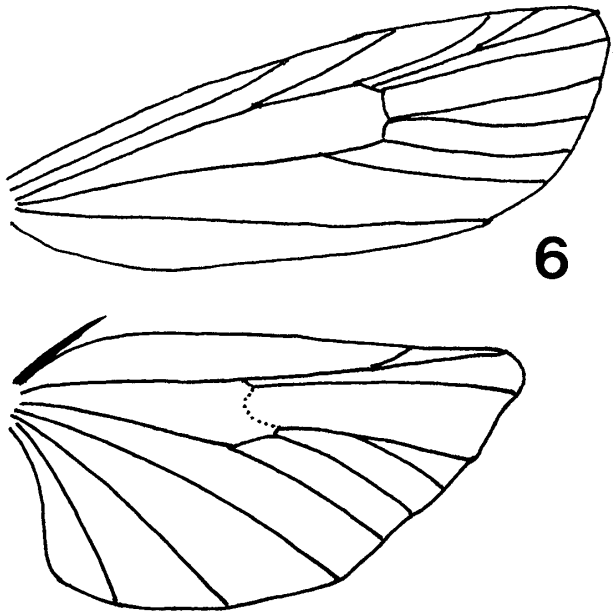

Fig. 6. Wing venation of *Neorufalda pullella* n. gen. *et* n. sp., ♂.

color above somewhat variable individually, *viz*. usually fuscous, and slightly suffused with reddish brown, but in some material uniformly fuscous or pale fuscous. Antemedial line grey, oblique distad, moderately curved outwardly, rather faint, inner side of antemedial line usually pale brown, but in some material strongly suffused with reddish brown. Submarginal line very narrow, grey, rather faint, almost straight. A small greyish white lunule on discocellulars. Costal area of inner side of submarginal line, usually narrowly dusted with ashy grey. Cilia grey with a pale fuscous subbasal line. Hind wing dusky grey. Cilia concolorous with fore wing. Ground color of under surface of both wings dark grey, but greyish color of fore wing somewhat stronger than on hind wing. Expanse 16 mm – 18 mm.

Male and female genitalia: As described for the genus.

Holotype: ♀, Chugu Spa, Ishikawa Pref., Honshu, 3. vii. 1976 (A. TOMISAWA), in coll. H. YAMANAKA.

Paratypes: 1 ♀, Shibecha, Kushiro, Hokkaido, 21. vii. 1980 (K. IJIMA), in coll. H. INOUE; 1 ♀, Kanetsuri, Unazuki, Toyama Pref., Honshu, 21. vii. 1973 (H. YAMANAKA); 4 ♂, 4 ♀, Ôdawa Pass, Arimine, Toyama Pref., Honshu, 21. vii. 1979 (H. YAMANAKA); 1 ♀, as above, 28. vii. 1979 (H. YAMANAKA); 2 ♀, data as holotype (A. TOMISAWA); 2 ♀, Ichinose, Ishikawa Pref., Honshu, 12. vii. 1980 (A. TOMISAWA), in coll. H. YAMANAKA.

Geographical distribution. Japan (Hokkaido and Honshu).

Nephopterix tomisawai n. sp.

(Figs. 2, 9, 14, 23)

External characters: Frons and labial palpus fuscous, slightly mixed with whitish

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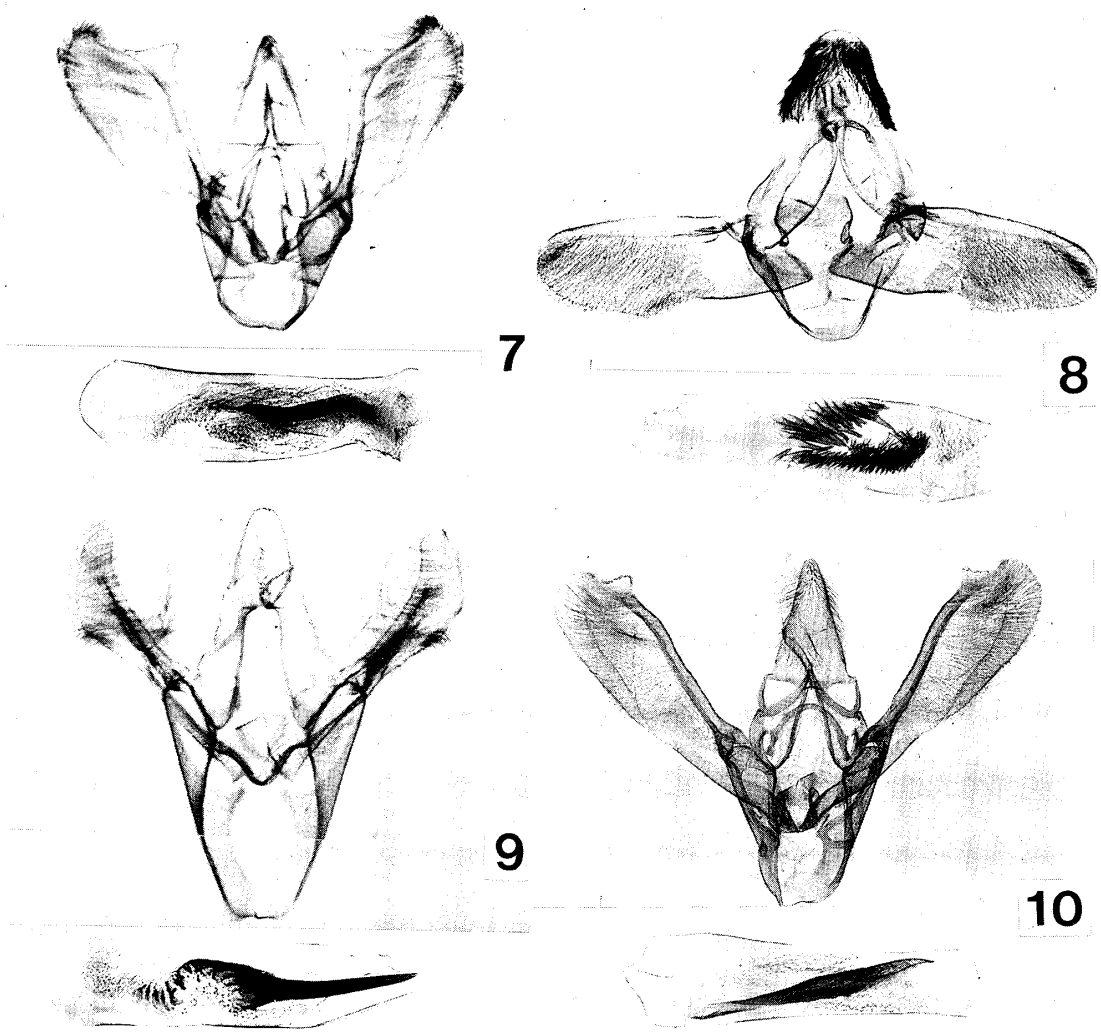

Figs. 7 – 10. Male genitalia. 7. *Neorufalda pullella* n. gen. *et* n. sp.; 8. *Eucampyla estriatella* n. sp.; 9. *Nephopterix tomisawai* n. sp.; 10. *Glyptoteles leucacrinella* ZELLER.

scales. Long scaled brush-like maxillary palpus of male pale fuscous, while in female fuscous. Abdomen dorsally fuscous with pale yellow posterior fringe at each segment, abdomen ventrally more or less pale in color than dorsal surface. Legs fuscous, slightly mixed with whitish scales, but their inner surface white. Ground color of fore wing fuscous, with more or less extended white dusting. Antemedial line white, oblique, slightly sinuated. Two small blackish dots on discocellulars. Submarginal line white, narrow, almost parallel to outermargin, but slightly curved inwardly for a short distance at costa. Cilia grey, but its tip more or less white-tinted. Hind wing smoky grey. Cilia almost grey. Under surface of both wings smoky grey, submarginal line of fore wing weakly reproduced, and coloration of fore wing rather darker than hind wing. Expanse 20 mm – 22 mm.

Male genitalia: Uncus triangulate, apex blunt. Gnathos with a small, sclerotized sagittal central process. Valva somewhat narrow, gently bent, apex rounded. Harpe small, lobed, weakly sclerotized, placed near base of valva. Sacculus narrowly tubed.

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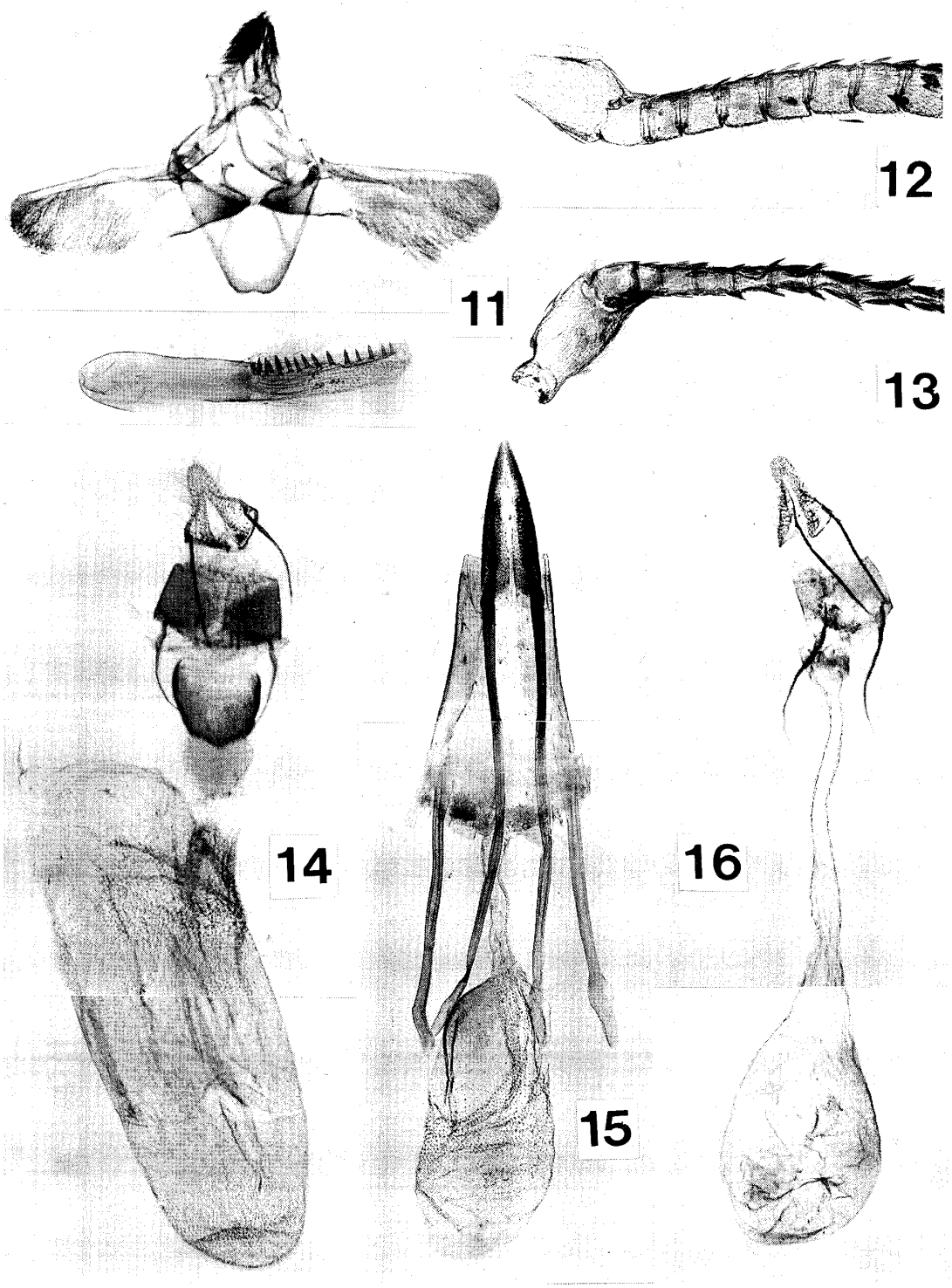

Fig. 11. Male genitalia of *Phycitodes albatellus* (RAGONOT).
Figs. 12 – 13. Antenna of *Neorufalda pullella* n. gen. *et* n. sp. 12. Male ; 13. Female.
Figs. 14 – 16. Female genitalia. 14. *Nephopterix tomisawai* n. sp. ; 15. *Eucampyla estriatella* n. sp. ; 16. *Glyptoteles leucacrinella* ZELLER.

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Vinculum broad, large, rather truncated. Anellus oblong, weakly sclerotized. Aedeagus with a large thorn of cornutus. Structure of eighth abdominal sternite shown in Fig. 23.

Female genitalia: The length of apophyses posteriores almost equal to apophyses anteriores, but the former is a little slenderer than the latter. Ostium with a sclerotized quadrilateral plate ventrally. Ostium bursae conspiciously granulated. Ductus bursae very short. Corpus bursae large, oblong, and its shoulder widely expanded. Signa obsolete.

Host plant. Azalea.

Holotype: ♀, Nakanotôge, Ishikawa Pref., Honshu, 28. vi. 1975 (A. TOMISAWA), in coll. H. YAMANAKA.

Paratypes: 1 ♂, Tassha, Sado Is., Niigata Pref., 23. vii. 1969 (R. SATO); 3 ♂, 1 ♀, Suginomizu, Ishikawa Pref., Honshu, 3. vi. 1978 (A. TOMISAWA); 1 ♀, Toga Village, Toyama Pref., Honshu, 19. viii. 1974 (H. YAMANAKA); 1 ♂, 4 ♀, Mt. Mitsubo, Asahi-machi, Toyama Pref., Honshu, 26. vi. 1982 (H. YAMANAKA), in coll. H. YAMANAKA; 2 ♂, 2 ♀, Bushi, Iruma-shi, Saitama Pref., Honshu, 27. v. 1973, 5. vii. 1980, 16. vi. 1981, 28. vi. 1981 (H. INOUE); 2 ♂, 1 ♀, Iwamuroyama, E. Izu, Shizuoka Pref., Honshu, 24. vii. 1960 (H. INOUE); 1 ♀, Awa Is., Niigata Pref., 27. viii. 1968 (R. SATO); 1 ♀, Bira, Anamizu, Ishikawa Pref., Honshu, 21. vii. 1955 (A. KAWABE); 1 ♂, Aotani, Kanazawa, Ishikawa Pref., Honshu, 8. vii. 1981 (I. TOGASHI); 1 ♀, Kônotaki, Kida-gun, Kagawa Pref., Shikoku, 10. v. 1975 (T. MASUI); 1 ♀, Isahaya, Nagasaki Pref., Kyushu, 17. vii. 1972 (S. TAKIZAWA): Larva of this moth is a leaf roller of azalea, in coll. H. INOUE.

Geographical distribution. Japan (Honshu, Sado Is., Awa Is., Shikoku and Kyushu)

Eucampyla estriatella n. sp.

(Figs. 3, 8, 15, 22)

External characters: Labial palpus fuscous, slightly mixed with whitish scales. Maxillary palpus white, slightly mixed with pale fuscous scales. Frons and vertex roughly covered with whitish scales. Thorax pale yellow, slightly mixed with pale fuscous scales. Abdomen dorsally pale yellow, without markings, white ventrally. Legs pale yellow, but outer surface more or less suffused with fuscous scales. Fore wing pale yellowish grey, and wholly scattered with pale fuscous scales. Submarginal line white, obscure, slightly curved outwardly, and bordered inwardly by several fuscous dots. Two minute fuscous streaks at both upper and lower angle of cell. Antemedial line oblique, very faint, consisting of several obscure fuscous dots. Hind wing white, semitransparent, veins slightly yellowish-tinted, and marginal area narrowly fringed with pale fuscous. Cilia of both wings white. Under surface of fore wing dusky grey, hind wing paler than fore wing. Expanse 12 mm – 15 mm.

Male genitalia: Uncus triangulate with numerous fuscous setae dorsally, apex rounded. Gnathos with central process minute, pointed at apex, not hooked. Valva rather short, smoothly rounded at apex, costa almost straight. Harpe minutely lobed,

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setting near base of valva. Sacculus weakly sclerotized, and triangularly specialized distally. Vinculum broad, short. Anellus somewhat quadrate, weakly sclerctized. Aedeagus short, triangularly bifid distally. Cornuti composed by many short spines. Structure of eighth abdominal sternite shown in Fig. 22.

Female genitalia: Apophyses anteriores rather short, almost straight, more or less inflated distally. Apophyses posteriores long, inflated as in apophyses anteriores, and nearly two times length of apophyses anteriores. Ostium simple. Ductus bursae narrow, membraneous. Corpus bursae small, rather oval, with a granulated maculation extending on one side of its shoulder. Signa consisting of a group of small scobination.

Holotype: ♀, Mizudo, Shiroishi-machi, Saga Pref., Kyushu, 6. ix. 1983 (N. MORI), in coll. H. YAMANAKA.

Paratypes: 3 ♀, Karashima, Saga Pref., Kyushu, 24. x. 1983 (N. MORI); 1 ♀, data as holotype (N. MORI); 1 ♂, 4 ♀, Mt. Yuwan-dake, Amami-Ôshima Is., 15–17. viii. 1977 (R. SATO), in coll. H. YAMANAKA; 1 ♀, Sakiyama, Muroto-shi, Kôchi Pref., Shikoku, 5. ix. 1981 (T. MASUI); 1 ♂, 1 ♀, Yona, Okinawa, 18–21. x. 1973 (M. OWADA), in coll. H. INOUE.

Geographical distribution. Japan (Shikoku, Kyushu, Amami-Ôshima Is. and Okinawa)

Remarks. This new species is very similar to *Eucampyla etheiella* MEYRICK distributed in Sumatra, Australia, Tahiti and Rapa Is., but differs in the following external and genital characters: veins of fore wing not blackish-tinted; sacculus conspicuously triangularly specialized distally; apophyses anteriores and posteriores inflated distally.

Glyptoteles leucacrinella ZELLER, 1848
(Figs. 4, 10, 16, 19)

Glyptoteles leucacrinella ZELLER, 1848, Isis, Leipzig, **1848**: 646; HERRICH-SCHÄFFER, 1851, Syst. Bearb. Schmett. Eur., **4**: 101; RAGONOT, 1893, *In* ROMANOFF, Mém. Lépid., **7**: 62, pl. 7, fig. 8; REBEL, 1901, *In* STAUDINGER & REBEL, Cat. Lepid. Palaearct. Faunengebietes, **2**: 40; CARADJA, 1927, Memle Sect. Stiint. Acad. rom., (3) **4**: 400; HANNEMANN, 1964, Kleinschmett. Microlepid. II, Tierwelt Deutschlands, **50**: 200, figs. 128a–d, pl. 15, fig. 2.

Material examined: 1 ♂, 2 ♀, Kumanotaira, Gunma Pref., Honshu, 7. ix. 1959 (T. MAENAMI); 1 ♀, Mt. Takao, Tokyo, Honshu, 25. v. 1959 (T. MAENAMI); 1 ♀, as above, 30. viii. 1959 (T. MAENAMI); 1 ♂, 1 ♀, Okuchizawa, Toyoshina, Nagano Pref., Honshu, 5. vii. 1980 (N. HIRANO); 2 ♀, Kurikara, Oyabe-shi, Toyama Pref., Honshu, 26. viii. 1967 (H. YAMANAKA); 1 ♀, Seridani, Tonami-shi, Toyama Pref., Honshu, 28. vi. 1969 (H. YAMANAKA); 1 ♀, Kanetsuri, Unazuki, Toyama Pref., Honshu, 21. vii. 1973 (H. YAMANAKA); 1 ♂, 4 ♀, Mt. Jôyama, Toyama-shi, Toyama Pref., Honshu, 27. ix. 1973 (H. YAMANAKA); 2 ♀, Toga Village, Toyama Pref., Honshu, 19. viii. 1974 (H. YAMANAKA); 1 ♂, 1 ♀, Suganuma, Kamitaira Village, Toyama Pref., Honshu, 28.

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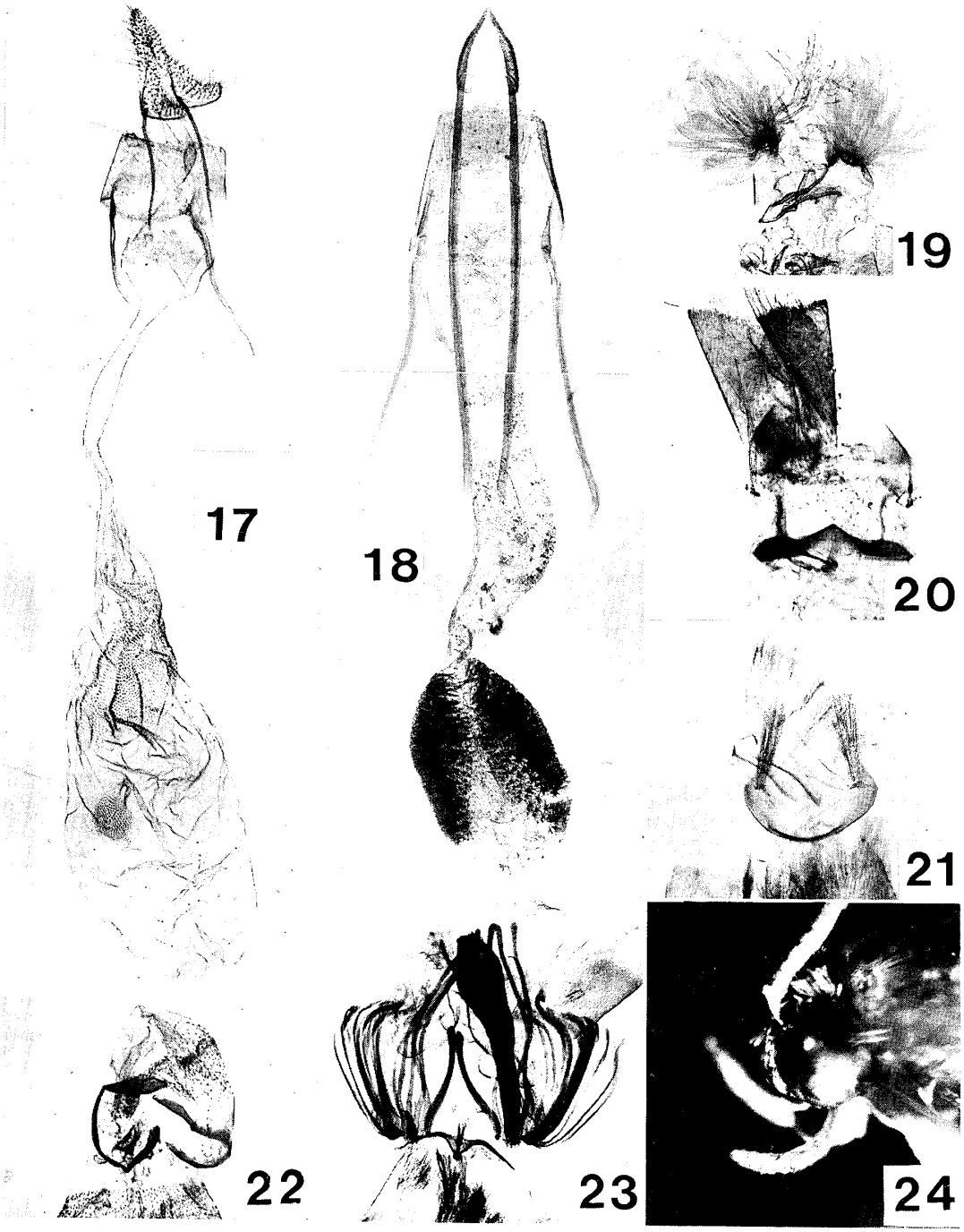

Figs. 17 – 18. Female genitalia. 17. *Neorufalda pullella* n. gen. *et* n. sp.; 18. *Phycitodes albatellus* (RAGONOT).

Figs. 19 – 23. Eighth abdominal sternite. 19. *Glyptoteles leucacrinella* ZELLER; 20. *Neorufalda pullella* n. gen. *et* n. sp.; 21. *Phycitodes albatellus* (RAGONOT); 22. *Eucampyla estriatella* n. sp.; 23. *Nephopterix tomisawai* n. sp.

Fig. 24. Head and labial palpi of *Neorufalda pullella* n. gen. *et* n. sp., ♂.

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viii. 1974 (H. YAMANAKA); 1 ♂, 2 ♀, Mt. Houtatsuzan, Ishikawa Pref., Honshu, 29. viii. 1975 (A. TOMISAWA); 2 ♀, Mt. Houryuzan, Ishikawa Pref., Honshu, 13. ix. 1979 (A. TOMISAWA); 1 ♀, Ichibata, Hirata, Izumo, Shimane Pref., Honshu, 27. vi. 1967 (T. MAENAMI); 1 ♀, Sato, Mikurajima, Izu Is., 23. vi. 1964 (T. MAENAMI); 1 ♀, Kozushima, Izu Is., 19. v. 1966 (T. MAENAMI); 1 ♀, Mt. Koshiba, Awa Is., Niigata Pref., 8. viii. 1967 (R. SATO); 5 ♀, Shougensha, Kinryu-machi, Saga Pref., Kyushu, 2. v. 1982 (N. MORI).

Geographical distribution. Europe, China, Japan (Honshu, Izu Is., Awa Is. and Kyushu).

Phycitodes albatellus (RAGONOT, 1887)
(Figs. 5, 11, 18, 21)

Homoeosoma albatella RAGONOT, 1887, Annls Soc. ent. Fr., (6) **7**: 225.

Phycitodes albatellus: ROESLER, 1973, *In* AMSEL *et al.* Microlepid. Palaearct., **4**: 591, pl. 55, figs. 279a–c, pl. 88, fig. 279 (♂ -genitalia), pl. 155, fig. 279 (♀ -genitalia).

Material examined: 2 ♀, Azohara, Unazuki, Toyama Pref., Honshu, 25. viii. 1973 (H. YAMANAKA); 1 ♂, as above, 24. viii. 1974 (H. YAMANAKA).

Geographical distribution. Palaearctic region (Hereby added Japan as a new distribution).

Remarks. This species is widely distributed in the Palaearctic region. In 1973, ROESLER analized geographical races of this species, and divided them into four subspecies: nominate subsp. *albatellus* (RAGONOT) from West Asia and Middle East, subsp. *pseudonimbellus* (BENTINCK) from South and Middle Europe, subsp. *dierli* ROESLER from South Asia (Nepal), subsp. *ussuriellus* (ROESLER) (Inaugural-Dissertation Saarbrücken (1964) **1965**: 105) from Far East of USSR (Ussuri) and Asia (China). Accorcing to my observation the Japanese representative almost matches subsp. *ussuriellus* in coloration and pattern of wings.

摘　　要

日本産マダラメイガ亜科の1新属新種および
2新種の記載と2未記録種について（山中　浩）

Neorufalda pullella YAMANAKA アカウスグロマダラメイガ（新称）

新種 *pullella* YAMANAKA を記載し，これを属の type-species として新属 *Neorufalda* を創設した．*pullella* YAMANAKA は北海道（釧路），本州北陸地方（富山，石川）で7月に採れた標本にもとづいて記載した．

Nephopterix tomisawai YAMANAKA トミサワマダラメイガ（新称）

本種は新潟（淡島，佐渡ヶ島），富山，石川，埼玉，静岡，香川，長崎で5月から8月に採れた標本にもとづいて記載した．なお，長崎の個体（井上寛博士所蔵）はツツジの葉を綴っていた幼虫を飼育し，羽化させたものである．

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Eucampyla estriatella YAMANAKA シロチビマダラメイガ（新称）

四国（高知），九州（佐賀），沖縄，奄美大島，で8月から10月に採れた標本にもとづいて記載した種である．沖縄，奄美大島では比較的多く採れるようだが，四国，九州では稀と思われる．本種はオーストラリア，タヒチ，スマトラ，ラパ島などに分布する *Eucampyla etheiella* MEYRICK と近縁である．

Glyptoteles leucacrinella ZELLER ウスオビクロマダラメイガ（新称）

今までヨーロッパ，中国に分布する種として知られていたが，我が国にも分布することがわかった．日本では本州中部以西に広く分布すると思われる．筆者は群馬，長野，東京（高尾山），新潟（淡島），富山，石川，島根，伊豆諸島（三蔵島，神津島），佐賀で採れた標本を検した．

Phycitodes albatellus (RAGONOT) シロホソマダラメイガ（新称）

旧北区に広く分布する種として知られていたが，我が国からは今まで記録されていなかったものである．今度，富山県宇奈月町阿曽原で8月に採れた種が，本種に該当することが判明したので，ここに日本未記録種として報告した．ROESLER (1973) は本種の地理的亜種を調べ西アジア，中東に分布するものを原名亜種とし，南ヨーロッパ，中部ヨーロッパの亜種を *pseudonimbellus* (BENTINCK)，南アジア（ネパール）の亜種を *dierli* ROESLER，ソ連極東（ウスリー），東アジア（中国）の亜種を *ussuriellus* (ROESLER) としたが，筆者が検した日本産の標本は ROESLER の記載から判断すると，亜種 *ussuriellus* に属するものと思われる．

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